

REMARKS/DISCUSSION OF ISSUES

The acceptance of the drawings and acknowledgement of receipt of the certified copies and all priority documents is noted with appreciation.

The Specification is currently amended to correct two typographical errors occurring at lines 2 and 4 of page 12, i.e., to change the reference number for the LCD device from 20 to 50, as correctly shown in Fig. 1A and claim 17.

Claims 1 and 4-17 are pending in the application. Claims 2 and 3 are cancelled. Claims 1, 11, 15 and 17 are currently amended.

Claims 3, 11, 15 and 17 are objected to because of incorrect use of antecedent basis.

Claim 3 is cancelled. Claims 11, 15 and 17 are currently amended to correct their dependencies, as suggested by the Examiner.

Accordingly, correct antecedent basis exists, and it is urged that the objection should be withdrawn.

Claims 1-13, 16 and 17 are rejected under 35 USC 102(b) as being anticipated by Umemoto et al. (U.S. 5,727,107) (herein 'Umemoto').

Umemoto discloses a light guide plate 1 including an outgoing radiation plane 11, an opposed bottom plane having projections or recesses with long-side and short-side faces, and an input face 13. In the embodiment of Fig. 4, the bottom plane 18 is first inclined downwardly away from the outgoing radiation plane 11 for a distance from the input face 13, and thence is inclined upwardly toward the outgoing radiation plane 11, so that the light guide plate 1 first widens and then narrows with increasing distance from the input face 13.

Claim 1 is currently amended to incorporate the limitations of claims 2 and 3, and claims 2 and 3 are cancelled.

Claim 1 now calls for the average angle  $\beta_{av}$  to be in the range  $5 \leq \beta_{av} \leq 25^\circ$ . The angle  $\beta$  is defined as the angle between surface (17) of the steps (13, 13', ...) facing the input edge surface (4) and the normal to a bisecting plane (20) bisecting the light-emitting panel (1). See Fig. 1B.

The only teaching of Umemoto regarding the angle of the short-side faces of the projections or recesses is that the angle  $\theta_2$  between the short-side faces and the outgoing radiation plane 11 should be between 25 and 50 degrees. See col. 7, lines 40-42.

This angular relationship is different than that disclosed and claimed by Applicant. Moreover, while there is no direct geometrical correlation between the angles  $\beta$  and  $\theta_2$ , nevertheless, an approximate correlation is possible. Referring to Applicant's Fig. 1B, it can be seen that bisecting line 20 is nearly parallel to the front wall 2. If it is assumed that bisecting line 20 is parallel to the front wall 2, then the angles  $\beta$  and  $\theta_2$  would be complementary angles of a right triangle, so that the sum of angles  $\beta$  and  $\theta_2$  would be 90 degrees. Following the teachings of Umemoto, the angle  $\beta$  would then be in the range of 40-65 degrees, far in excess of the range claimed by Applicant.

Since Umemoto does not teach or suggest Applicant's angular relationship for the step surfaces 17, Umemoto fails to anticipate Applicant's claims.

Accordingly, the rejection under 35 USC 102(b) as being anticipated by Umemoto is in error and should be withdrawn.

Claims 14 and 15 are rejected under 35 USC 103(a) as being unpatentable over Umemoto in view of Maas et al. U.S. patent 6,745,506 (herein 'Maas').


Maas discloses a luminaire and light-emitting panel which may include colored LEDs as light sources, the LEDs having luminous fluxes of at least 5 lm. See col. 6, lines 28-33.

Without conceding the patentability per se of these claims, they are nevertheless patentable by virtue of their dependency on claim 1.

Accordingly, the rejection under 35 USC 103(a) as being unpatentable over Umemoto in view of Maas should be withdrawn.

In view of the foregoing, Applicant respectfully requests that the Examiner withdraw the rejections and objection of record, allow all of the pending claims, and find the application to be in condition for allowance.

Respectfully submitted,

  
John C. Fox, Reg. 24,975  
Consulting Patent Attorney